Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

We Claim

1. (Currently Amended) Apparatus for optimized electro-hydraulic pressure pulse generation; comprising an electro-hydraulic shock wave system wherein said shock wave system is equipped with a measuring and control device which measures a discharge current and corrects changing system parameters during normal use between at least two electrode tips, and wherein the current measurement results are used to check if the pressure pulse generation is taking place in a selected oscillation range and a system parameter correction is made after each discharge and for each treatment the total number of discharges released is able to stabilize the shock wave system due to successive execution of the system parameter changes during normal operation.

2. (Previously Amended) Apparatus as claimed in claim 1, wherein the measuring and control device measures a discharge voltage.

3. (Previously Amended) Apparatus as claimed in in claim 1, wherein the measuring and control device defines a discharge output.

4. (Previously Amended) Apparatus as claimed in that in claim 1, wherein the measuring and control device compares at least one measured or control value with at least one set value.

5. (Previously Amended) Apparatus as claimed in claim 1, wherein an electrode distance between said electrode tips is variable.

6. (Previously Amended) Apparatus as claimed in claim 5 wherein

in case of deviation of at least one measured or control value from at least one set value., or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects the electrode distance.

7. (Currently Amended) Apparatus as claimed in claim 1, wherein

in case of deviation of at least one measured or control value from at least one set value,

or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects [[the]] a charging voltage.

8. (Canceled)

9. (Currently Amended) Process for the generation of optimized electro-hydraulic pressure pulses characterized by the following process steps:

a) Setting of a RLC circuit and of an electrode distance in an electro-hydraulic shock wave system to selected initial parameters,

b) Initiation of a discharging process,

c) Determination of a discharge current during normal use and at least one measured value by a measuring and control device,

d) Comparison with at least one set value to check if the pressure pulse generation is taking place in a selected oscillation range,

e) Correction of a system parameter by a correction increment based on a deviation from the set value, the correction being made after each discharge to stabilize the discharge process due to successive execution of the system parameter changes during normal operation, and

f) Further with b).

10. (Previously Presented) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 1.

11. (Previously Presented) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 1.

12. (Previously Presented) A method for extra-corporeally disintegrating concretions in

human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 2.

13. (Previously Presented) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 2.

14. (Previously Presented) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 3.

15. (Previously Presented) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said

shock wave is delivered by the apparatus of claim 3.

16.(Previously Presented) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 4.

17. (Previously Presented) An extra-corporeal treatment method for treating at least one

tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 4.

18. (Previously Presented) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 5.

19. (Previously Presented) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 5.

20. (Previously Presented) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 6.

21. (Previously Presented) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 6.

22. (Previously Presented) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 7.

23. (Previously Presented) An extra-corporeal treatment method for treating at least one

tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 7.

24. (Previously Presented) Apparatus as claimed in claim 2, wherein the measuring and control device defines a discharge output.

25.(Previously Presented) Apparatus as claimed in claim 2, wherein the measuring and control device compares at least one measured or control value with at least one set value.

26. (Previously Presented) Apparatus as claimed in claim 2, wherein an electrode distance between said electrode tips is variable.

27. (Previously Presented) Apparatus as claimed in claim 26, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects the electrode distance.

28. (Previously Presented) Apparatus as claimed in claim 2, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.

29. (Previously Presented) Apparatus as claimed in claim 3, wherein the measuring and control device compares at least one measured or control value with at least one set value.

30. (Previously Presented) Apparatus as claimed in claim 3, wherein an electrode distance between said electrode tips is variable.

31. (Previously Presented) Apparatus as claimed in claim 30, wherein

in case of deviation of at least one measured or control value from at least one set

value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects the electrode distance.

32. (Previously Presented) Apparatus as claimed in claim 3, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.

33. (Previously Presented) Apparatus as claimed in claim 4, wherein an electrode distance between said electrode tips is variable.

34. (Previously Presented) Apparatus as claimed in claim 33, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects the electrode distance.

35. (Previously Presented) Apparatus as claimed in claim 4, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.

36. (Previously Presented) Apparatus as claimed in claim 5, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.